Amendment and Response

Applicant: Renato J. Recio et al.

Serial No.: 09/980,760 Filed: April 15, 2002

Docket No.: 10003629-2 (H300.136.101)

Title: CONGESTION MANAGEMENT IN DISTRIBUTED COMPUTER SYSTEM

REMARKS

The following remarks are made in response to the Office Action mailed June 1, 2004. Claims 2-25 were rejected. With this Response, claims 2 and 14 have been amended. Claims 2-25 remain pending in the application and are presented for reconsideration and allowance.

Claim Rejections under 35 U.S.C. § 102

The Examiner rejected claims 2-5, 10-12, 14-17, and 22-24 under 35 U.S.C. § 102(b) as being anticipated by the Chiussi et al. U.S. Patent No. 5,701,292.

Applicants respectfully submit that the Chiussi et al. Patent does not teach or suggest the invention of amended independent claim 2.

Amended independent claim 2 recites a distributed computer system. The distributed computer system comprises links and end stations coupled between the links. Types of end stations include endnodes which originate or consume frames and routing devices which route frames between the links and do not originate or consume frames. The end stations include a first source endnode which originates frames at a variable injection rate. The first source endnode includes a congestion control mechanism responding to detected congestion by multiplicatively decreasing the variable injection rate.

The Chiussi et al. Patent discloses a method and apparatus for controlling the data transfer rates of data sources in an asynchronous transfer mode-based network that utilizes maximum and minimum data transfer rates of sources in the network. A switch instructs data sources within the network to modify their data transfer rates by detecting potential congestion and congested states. (Abstract). Each data source also transmits an identifier or address to a switch 1 which identifies it from every other data source in the network. The data source 1, 2, ... n periodically sends an electronic code or RM cell to the switch 1. Subsequently, the switch 1 will return an electronic code or RM cell to each data source. The RM cell, among other things, contains information regarding the data transfer rate of each data source. When an RM cell is sent by a data source 1, 2 ... n to the switch 1, the RM cell contains data transfer rate information regarding the data transfer or bit rate of the data source. When the RM cell is sent by the switch 1 to a data source 1, 2 ... n, the RM cell contains data transfer rate information that instructs the data source to either increase or

Amendment and Response

Applicant: Renato J. Recio et al.

Serial No.: 09/980,760 Filed: April 15, 2002

Docket No.: 10003629-2 (H300.136.101)

Title: CONGESTION MANAGEMENT IN DISTRIBUTED COMPUTER SYSTEM

decrease its data transfer rate by a specific amount or instructs the data source to operate at a specific transfer rate. (Column 3, lines 47-65).

The Chiussi et al. Patent fails to disclose the limitations of amended independent claim 2 of routing devices which route frames between the links and do not originate or consume frames. In contrast, the Chiussi et al. Patent discloses a switch 1 that does originate and consume frames including an RM cell.

In view of the above, the distributed computer system of amended independent claim 2 is not taught or suggested by the Chiussi et al. Patent. Dependent claims 3-5 and 10-12 further define patentably distinct independent claim 2. Accordingly, dependent claims 3-5 and 10-12 are also believed to be allowable.

Applicants respectfully submit that the Chiussi et al. Patent also fails to disclose the invention of independent claim 14. Independent claim 14 recites a method of controlling congestion in a distributed computer system having links and end stations coupled between the links, wherein types of end stations include endnodes which originate or consume frames and routing devices which route frames between the links and do not originate or consume frames. The method comprises originating, from a first source endnode, frames at a variable injection rate, detecting congestion, and multiplicatively decreasing the variable injection rate in response to the detected congestion.

For the same reasons as discussed above with reference to amended independent claim 2, the Chiussi et al. Patent fails to disclose routing devices which route frames between the links and do not originate or consume frames as recited in independent amended claim 14.

In view of the above, the method of amended independent claim 14 is not taught or suggested by the Chiussi et al. Patent. Dependent claims 15-17 and 22-24 further define patentably distinct independent claim 14. Accordingly, dependent claims 15-17 and 22-24 are also believed to be allowable.

Therefore, Applicants respectfully request that the rejections to claims 2-5, 10-12, 14-17, and 22-24 under 35 U.S.C. § 102 be withdrawn and that these claims be allowed.

Amendment and Response

Applicant: Renato J. Recio et al.

Serial No.: 09/980,760 Filed: April 15, 2002

Docket No.: 10003629-2 (H300.136.101)

Title: CONGESTION MANAGEMENT IN DISTRIBUTED COMPUTER SYSTEM

Claim Rejections under 35 U.S.C. § 103

The Examiner rejected claims 6-9, 13, 18-21, and 25 under 35 U.S.C. § 103(a) as being unpatentable over the Chiussi et al. Patent in view of the Lauck et al., U.S. Patent No. 5,734,825.

Dependent claims 6-9 and 13 further define patentably distinct independent claim 2. Accordingly, dependent claims 6-9 and 13 are also believed to be allowable.

Dependent claims 18-21 and 25 further define patentably distinct independent claim 14. Accordingly, dependent claims 18-21 and 25 are also believed to be allowable.

Therefore, Applicants respectfully request that the rejections to claims 6-9, 13, 18-21, and 25 under 35 U.S.C § 103 be withdrawn and that these claims be allowed.

CONCLUSION

In view of the above, Applicant respectfully submits that pending claims 2-25 are in form for allowance and are not taught or suggested by the cited references. Therefore, reconsideration and withdrawal of the rejections and allowance of claims 2-25 is respectfully requested.

No fees are required under 37 C.F.R. 1.16(b)(c). However, if such fees are required, the Patent Office is hereby authorized to charge Deposit Account No. 08-2025.

The Examiner is invited to contact the Applicant's representative at the below-listed telephone numbers to facilitate prosecution of this application.

Amendment and Response
Special No.: 09/980,760

Filed: April 15, 2002

Docket No.: 10003629-2 (H300.136.101)

Title: CONGESTION MANAGEMENT IN DISTRIBUTED COMPUTER SYSTEM

Any inquiry regarding this Amendment and Response should be directed to either William J. Streeter at Telephone No. (970) 898-3886, Facsimile No. (970) 898-7247 or Patrick G. Billig at Telephone No. (612) 573-2003, Facsimile No. (612) 573-2005. In addition, all correspondence should continue to be directed to the following address:

Hewlett-Packard Company Intellectual Property Administration P.O. Box 272400 Fort Collins, Colorado 80527-2400

Respectfully submitted,

Renato J. Recio et al.

By their attorneys,

DICKE, BILLIG & CZAJA, PLLC Fifth Street Towers, Suite 2250 100 South Fifth Street Minneapolis, MN 55402 Telephone: (612) 573-2003

Facsimile: (613) 573-2005

Date: 9/1/04

PGB: kle

Patrick G. Billig Reg. No. 38,080

3y_____

Name: Patrick G. Billig